

CLAIMS

1. A method of fabricating a device, the method comprising:
providing a layer structure;
5 forming a first patterned layer onto a surface of said layer structure so as
to mask a first region of said surface;
forming a second patterned layer onto said surface layer of said layer
structure so as to mask a second region of said surface and to leave unmasked
a third region of said surface;
10 etching said layer structure in said third region; and
either removing said second patterned layer and etching said layer
structure in said second region or
removing said first patterned layer and etching said layer structure in said
first region, wherein at least one of said first or second patterned layers is
15 formed by printing.
2. A method according to Claim 1, wherein both of the first and
second patterned layers are formed by printing.
- 20 3. A method according to claim 2, wherein said printing of said
second patterned layer comprises:
overlapping said second patterned layer with at least a portion of said
first patterned layer.
- 25 4. A method according to claim 2 or 3, wherein said printing of said
second patterned layer occurs substantially immediately following the printing of
the first layer.
- 30 5. A method according to any one of claims 2, 3 or 4, comprising:
printing said first patterned layer having a first thickness and
printing said second patterned layer having a second, different thickness.

6. A method according to any one of claims 2 to 5, comprising:
using a first ink for printing said first patterned layer and
using a second ink for printing said second patterned layer

5 7. A method according to claim 6, wherein said first and second inks
are different.

8. A method according to claim 6 or 7, wherein said first and second
inks are diluted to different concentrations.

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9. A method of fabricating a thin-film transistor according to any
preceding claim.

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10. A method according to any preceding claim, further comprising:
providing a substrate;
providing a patterned conductive gate region on said substrate;
providing a dielectric layer overlying said substrate and said patterned
conductive gate region;
providing a first semiconductor layer overlying said dielectric layer;
20 providing a second semiconductor layer overlying said first
semiconductor layer;
providing a metalisation layer overlying said second semiconductor layer.

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11. A method according to any one of claims 2 to 10, when said
printing of said first layer includes defining regions for forming source and drain
terminals.

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12. Apparatus configured to perform the method according to any
preceding claim.

13. Apparatus for fabricating a thin-film transistor comprising:

printing means, said printing means configured to print a first patterned layer on a layer structure and a second, different patterned layer on a layer structure;

etching means, said etching means configured to said layer structure;
5 and

removing means, configured either to remove said first patterned layer and to leave at least part of said second patterned layer or to remove said second patterned layer and to leave at least part of said first patterned layer.